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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MCCLOUD, RENATA D	
ART UNIT	PAPER NUMBER
2837	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/692,263	BLILEY ET AL.	
	Examiner	Art Unit	
	Renata McCloud	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 October 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/12/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the third motor must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being anticipated by Hella (EP0833437, see translation) in view of Applicants admitted prior art (AAPA).

Claim 1: Hella teaches a two high switches (par. 17; referring to the first motor 50, switch 24 near 28, and switch 24 near 48) connected to a power source ("+" terminal at 18); two low side switches (par. 18; switch 26 near 36, and switch 26 near 48) connected to ground ("-" terminal at 22); a first configuration of the high and low switches connected together by closing switches to drive the motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists half bridge connections of two first and second switches 24,26); a second configuration (configuration at 54 and 52) in which the high switches (24) are first components and the low switches (26) are second components (par. 21), wherein each are coupled by closing switches to form discrete switches (par. 22 the switches 24 and 26 have individual and separate outputs and only have to be connected to form a half bridge) where one high switch (24) is coupled as a first component switch to a component (52) and one low switch (26) is coupled to a different component (54; par. 1, 4, 6).

It is unclear if Hella teaches the switches coupled together to independently drive a motor. Applicant's prior art teaches that it is well known in the art that an H-bridge is configured to independently drive a motor (pg 1:0003). It would have been obvious to one having ordinary skill in the art at the time the invention was made use the H-bridge of Hella independently, as admitted by applicant in order to drive plural motors.

4. Claims 4-16,23-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Hella in view of AAPA, and further in view of Blasius et al (US 4573410).

Claim 4: Hella teaches an asic (par 6) comprising a configurable first H-bridge circuit (24/26) that by alternative closing of switches includes a first configuration as a first motor drive circuit to drive a first motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists 24,26 half bridge connections of two first and second switches), and includes a second configuration as discrete switches (par. 22 the switches 24 and 26 have individual and separate outputs and only have to be connected to form a half bridge), each of the discrete switches configured to be coupled to supply electricity to different electrically-powered components (par. 1, 4, 6); and a configuration register (46) configured to control the first H-bridge circuit configuration as at least one of the first motor drive circuit or as the discrete switches to supply electricity to independent electrically-powered components (par. 19). It is unclear if Hella teaches the switches coupled together to independently drive a motor, or if the register is configured to maintain an indicator of the configurable first H-bridge circuit configuration. Applicant's prior art teaches that it is well known in the art that an H-bridge is configured to independently drive a motor (pg 1:0003). Blasius et al teach a configuration register (52) that maintains an indicator of the configuration of the H-bridge (col. 8:14-27,43-58; col. 9:7-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made use the H-bridge of Hella independently, as admitted by applicant in order to drive plural motors, and to maintain an indicator as taught by Blasius et al in order to determine the operating mode of the H-bridge.

Claim 5: Hella, AAPA, and Blasius et al teach the limitations of claim 4. Referring to claim 5, Hella teaches register (46) controlling the switches (24,26) as discrete switches

(configuration of 24,26 coupled to 52,54). Blasius et al teach a configuration register (52) configured to maintain an indicator of the configurable H-bridge circuit configuration (col. 8:14-27, 43-58; col. 9:7-15).

Claim 6: Hella, AAPA, and Blasius et al teach the limitations of claim 4. Referring to claim 5, Hella teaches register (46) controlling the switches (24,26) as discrete switches (configuration of 24,26 coupled to 52,54). Blasius et al teach a configuration register (52) configured to maintain a switch indicator that indicates a configuration of the switches (col. 8:14-27, 43-58 col. 9:7-15).

Claim 7: Hella, AAPA, and Blasius et al teach the limitations of claim 4. Referring to claim 7, Hella teaches the configurable first H-bridge circuit includes two high switches (24) connected to a voltage source (+), and includes two low switches (26) connected to ground (-); and in the first configuration as a motor drive circuit, one high switch and one low switch are configured to be connected together and coupled by closing switches to drive the motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists 24,26 half bridge connections of two first and second switches). Blasius et al also teach the configurable first H-bridge circuit includes two high switches (fig. 6:M1+, M2+) connected to a voltage source (+), and includes two low switches (M1-,M2-) connected to ground (-); and in the first configuration as a motor drive circuit, one high switch and one low switch are configured to be connected together and coupled by closing switches to drive the motor (9).

Claim 8: Hella, AAPA, and Blasius et al teach the limitations of claim 4. Referring to claim 8, **Hella** teaches at least a second H- bridge circuit (two pair of 24,26) configured to drive a second motor (second motor 50). Blasius et al also teach a second H-bridge (fig. 6:M3+-/M4+-) to drive a second motor (fig. 6:second motor 9)

Claim 9: Hella, AAPA, and Blasius et al teach the limitations of claim 4. Referring to claim 9, Hella teaches a second H-bridge circuit configured as a second motor drive circuit (two pair of 24,26 driving 50); a third H-bridge circuit implemented as a third motor drive circuit (two pair of 24,26); and wherein the second H-bridge circuit is configured to drive the first motor (first motor 50) and the third H-bridge circuit is configured to drive a second motor (second motor 50) in an event that the configurable first H-bridge circuit is configured as the discrete switches (configuration of 24,26 coupled to 52, 54).

Claim 10,23,31: Hella teaches a first motor (first motor 50); a second motor (second motor 50); a multiple H-bridge circuit including: a first H-bridge circuit configured to drive the first motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists half bridge connections of two first and second switches 24,26); a second H-bridge circuit configured to independently drive the second motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists half bridge connections of two first and second switches 24,26); and a configurable third H-bridge circuit that includes by alternative closing of switches a first configuration as a motor drive circuit to drive a third motor (50), and includes a second configuration as discrete switches (24,26 configured as coupled to 52,54) that are each configured to be coupled to a different component as a component switch (configuration of 24,26 coupled to 52,54; par. 22 the switches 24 and 26 have individual and separate outputs and only have to be connected to form a half bridge).

It is unclear if Hella teaches the switches coupled together to independently drive a motor. Hella also does not teach a printer. Applicant's prior art teaches that it is well known in the art that an H-bridge is configured to independently drive a motor (pg 1:0003).

Blasius et al teach a printing device, comprising: a first motor (fig. 6:9) configured for movable control of at least a first component in the printing device (col. 6:36-39); a second motor (9) configured for movable control of at least a second component in the printing device (col. 6:36-39); a multiple H-bridge circuit including: a first H-bridge circuit (fig 6:M1+-/M2+-, fig. 3:52) configured to drive the first motor (fig. 6:9); a second H-bridge circuit (fig 6:M3+-/M4+-, fig 3:52) configured to drive the second motor (fig 6: second motor 9; fig 3:52) and a configurable third H-bridge circuit (fig 3:52=fig 6:52) that includes by alternative closing of switches a first configuration as a motor drive circuit (52) to independently drive a third motor (fig 3:52=fig 6:9), and includes a second configuration (fig. 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Hella to independently drive motors as admitted by applicant and be used in a printing device as taught by Blasius et al in order to reduce the number of components.

Claim 11: Hella, AAPA, and Blasius et al teach the limitations of claim 10. Referring to claim 11, **Hella** teaches a register (46) that controls the third h-bridge as either a motor drive circuit (2 sets of 24,26) or as discrete switches (configuration of 24,26 coupled to 52,54). Blasius et al teach a configuration register (52) configured to maintain an indicator of the configurable third H-bridge circuit configuration (col. 8:14-27, 43-58; col. 9:7-15).

Claim 12: Hella, AAPA, and Blasius et al teach the limitations of claim 10. Referring to claim 12, Hella teaches a register (46) that controls the third h-bridge as discrete switches (configuration of 24,26 coupled to 52,54). Blasius et al teach a configuration register (52) configured to maintain an indicator that the configurable third H-bridge circuit is configuration (col. 8:14-27, 43-58; col. 9:7-15).

Claim 13: Hella, AAPA, and Blasius et al teach the limitations of claim 10. Referring to claim 13, Hella teaches a register (46) that controls the third h-bridge as discrete switches

(configuration of 24,26 coupled to 52,54). Blasius et al teach a configuration register (52) configured to maintain an indicator that the configurable third H-bridge circuit is configured as the discrete switches, the configuration register further configured to maintain a switch indicator that indicates a configuration (col. 8:14-27,43-58; col. 9:7-15).

Claim 14: Hella, AAPA, and Blasius et al teach the limitations of claim 10. Referring to claim 14, Hella teaches the configurable third H-bridge circuit includes a high switch (24) connected to a voltage source (+), and includes a low switch (26) connected to ground (-); and in the first configuration as a motor drive circuit, one high switch and one low switch are configured to be connected together and coupled by closing switches to drive the motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists 24,26 half bridge connections of two first and second switches). Blasius et al also teach the configurable first H-bridge circuit includes a high switch (fig. 6:M1+) connected to a voltage source (+), and includes a low switches (M1-) connected to ground (-); and in the first configuration as a motor drive circuit, one high switch and one low switch are configured to be connected together and coupled by closing switches to drive the motor (9).

Claim 15: Hella, AAPA, and Blasius et al teach the limitations of claim 10. Referring to claim 15, Hella teaches the configurable third H-bridge circuit includes a high switch (24) connected to a voltage source (+), and includes a low switch (26) connected to ground (-); and in the second configuration, one high switch and one low switch are configured as component switches (configuration of 24,26 coupled with 52,54).

Claim 16: Hella, AAPA, and Blasius et al teach the limitations of claim 10. Referring to claim 16, Hella teaches an ASIC including the multiple H-bridge circuit (24/26 for each motor) and a register (46) controlling the switches (24,26). Blasius et al teach an application-specific integrated circuit (figs. 3,5,6:52; col. 8:14-19) that includes the multiple H-bridge circuit, (fig.

6:M1/M2/M3/M4 +-) the ASIC further including a configuration register configured to maintain an indicator of the configurable third H-bridge circuit configuration (col. 8:14-27).

Claim 24: Hella, AAPA, and Blasius et al teach the limitations of claim 23. Referring to claim 24, Hella teaches coupling the configurable third H-bridge circuit to drive the third motor (50) in the first configuration (two sets of 24/26).

Claim 25: Hella, AAPA, and Blasius et al teach the limitations of claim 23. Referring to claim 25, Hella teaches coupling the switch (26) of the configurable third H-bridge circuit to a component (54) in the second configuration (configuration of 24,26 coupled to 52,54).

Claim 26: Hella, AAPA, and Blasius et al teach the limitations of claim 23. Referring to claim 26, Hella teaches a register (46) controlling the third H-bridge (24,26); Blasius et al teach writing an indicator to a configuration register (52) to indicate a configuration of the configurable third H-bridge circuit (col. 8:43-58).

Claim 27: Hella, AAPA, and Blasius et al teach the limitations of claim 23. Referring to claim 27, Hella teaches a register (46) controlling the third H-bridge (24,26) to drive a third motor (50). Blasius et al teach writing an indicator to a configuration register (52) to indicate a configuration of the configurable third H-bridge circuit (col. 8:43-58) and coupling the third H-bridge to drive a third motor (fig 3:52, fig 6:52/9).

Claim 28: Hella, AAPA, and Blasius et al teach the limitations of claim 23. Referring to claim 28, Hella teaches a register (46) controlling the third H-bridge to couple a switch of the third H-bridge to a component (configuration of 24,26 coupled to 52,54). Blasius et al teach writing an indicator to a configuration register to indicate a configuration of the configurable third H-bridge circuit (col. 8:43-58).

Claim 29: Hella teaches an asic (par 6) comprising a configurable first H-bridge circuit (24/26) that by alternative closing of switches includes a first configuration as a first motor drive

circuit to drive a first motor (par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists 24,26 half bridge connections of two first and second switches), and includes a second configuration as discrete switches (par. 22 the switches 24 and 26 have individual and separate outputs and only have to be connected to form a half bridge), each of the discrete switches configured to be coupled to supply electricity to different electrically-powered components (par. 1, 4, 6); and a configuration register (46) configured to control the first H-bridge circuit configuration as at least one of the first motor drive circuit or as the discrete switches to supply electricity to independent electrically-powered components (par. 19). It is unclear if Hella teaches the switches coupled together to independently drive a motor, directing a printer, or if the register is configured to maintain an indicator of the configurable first H-bridge circuit configuration. Applicant's prior art teaches that it is well known in the art that an H-bridge is configured to independently drive a motor (pg 1:0003). Blasius et al teach directing a printing device (col. 6:25-28) and a configuration register (52) that maintains an indicator of the configuration of the H-bridge (col. 8:14-27,43-58; col. 9:7-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made use the H-bridge of Hella independently, as admitted by applicant in order to drive plural motors, and to maintain an indicator in a printer as taught by Blasius et al in order to determine the operating mode of the H-bridge.

Claim 30: Hella, AAPA, and Blasius et al teach the limitations of claim 29. Referring to claim 29, Hella teaches coupling an output of a high switch (24) of the configurable H-bridge circuit to an input of a low switch (26) of the configurable H-bridge circuit, the high switch (24) connected to a voltage source (+) and the low switch (26) connected to ground (-); and coupling

the high switch and the low switch to the motor in the first configuration that the configurable H-bridge circuit is implemented as the motor drive circuit (two sets of 24,26). Blasius et al also teach coupling an output of a high switch (M1+) of the configurable H-bridge circuit to an input of a low switch (M1-) of the configurable H-bridge circuit, the high switch (M1+) connected to a voltage source (+) and the low switch (M1-) connected to ground (-); and coupling the high (M1+) switch and the low switch (M1-) to the motor (9) in the first configuration that the configurable H-bridge circuit is implemented as the motor drive circuit (M1+-, M2+-).

Claim 32: Hella, AAPA, and Blasius et al teach the limitations of claim 31. Referring to claim 32, Hella teaches: the means to drive the first motor (50) is a second H-bridge circuit (24,26) of a multiple H-circuit that includes the configurable first H-bridge circuit (24,26 belonging to the third motor 50); and the means to drive the second motor is a third H-bridge circuit (24,26 belonging to the second motor 50) of the multiple H-circuit (24,26 of the first second and third motors 50).

Claim 33: Hella, AAPA, and Blasius et al teach the limitations of claim 31. Referring to claim 33, Hella teaches means to couple the configurable H-bridge (24,26) circuit to drive the third motor (50).

Claim 34: Hella, AAPA, and Blasius et al teach the limitations of claim 31. Referring to claim 34, Hella teaches means to couple a switch of the configurable H-bridge circuit as a component switch (24,26 coupled to 52,54)

5. Claims 17,19-21,35-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Hella in view of Blasius et al (US 4573410).

Claim 17: Hella teaches a method, comprising: coupling the configurable H-bridge circuit to drive a motor in an event that the configurable H-bridge circuit is implemented as the motor drive circuit par. 20; each 50 switched into a Vollbrücke {full bridge: Voll= full, brücke= bridge} which in each case consists half bridge connections of two first and second switches 24,26); and coupling a discrete switch of the configurable H-bridge circuit as a component switch in an event that the configurable H-bridge circuit is implemented as the discrete switches to supply electricity to electrically-powered components (configuration of 24,26 coupled to 52,54; par. 22 the switches 24 and 26 have individual and separate outputs and only have to be connected to form a half bridge). It is unclear if Hella teaches writing an indicator to a configuration register to indicate an implementation by alternative closing of switches of a configurable H-bridge circuit as at least one of a motor drive circuit or as discrete switches. Blasius et al teach writing an indicator to a configuration register (52) to indicate an implementation by alternative closing of switches of a configurable H-bridge circuit (col. 8:14-27, 43-58; col. 9:7-15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hella to write an indicator to a register as taught by Blasius et al in order to determine an operating mode.

Claim 19: Blasius et al teach writing a switch indicator to the configuration register (52) to indicate a configuration of the component switch (col. 8:14-27, 43-58; col. 9:7-15).

Claim 20: Hella teaches coupling the configurable H-bridge circuit to drive the motor includes: connecting an output of a high switch (24) of the configurable H-bridge circuit to an input of a low switch (26) of the configurable H-bridge circuit, the high switch connected to a voltage source (+) and the low switch connected to ground (-); and coupling the high switch and the low switch to drive the motor by closing the switches (par 2). Blasius et al also teach coupling the configurable H-bridge circuit to drive the motor includes: connecting an output of a

high switch (fig. 6:M1+) of the configurable H-bridge circuit to an input of a low switch (M1-) of the configurable H-bridge circuit, the high switch (M1+) connected to a voltage source (+) and the low switch (M1-) connected to ground (-); and coupling the high switch (M1+) and the low switch (M1-) to drive the motor (9)

Claim 21: Hella teaches a register (46) controlling the H-bridge (24/26) to drive the motor (50) in an event that the H-bridge circuit is implemented as the motor drive circuit. (par. 20). Blasius et al teach configuring an H-bridge circuit control according to the indicator in the configuration register (52) to couple the configurable H-bridge circuit to drive the motor in an event that the H-bridge circuit is implemented as the motor drive circuit. (col. 8:14-27,43-58; col. 9:7-15)

Claim 35: Hella teaches a first H-bridge circuit (24,26) configured to drive a first motor (first motor 50); a second H-bridge circuit (24,26) configured to drive a second motor (50); a register (46); and a third H-bridge circuit (24,26) including four switches (24,24,2626,), the four switches each having an individual configuration (24,26 configured connected to 52,54), and collectively having a programmable first configuration operable as a motor drive circuit (24,26 in a full bridge; par. 19) and a programmable second configuration operable as four discrete switches (24,26 connected to 52,54), wherein the register outputs a control signal to the switches (par. 19). They do not teach the register maintains an indication of the four switches' collective configuration separate from indications of each switches individual configuration. Blasius et al teach a register that maintains an indication of the H-bridges configuration (col. 8:43-59). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by Hella to maintain an indicator as taught by Blasius et al in order to determine the operating mode of the H-bridge.

Claim 36: Blasius et al teach the register (52) indicates the four switches' collective configuration with a single data bit (col. 8:43-64).

Claim 37: Hella teaches the switches programmed in the second configuration (24,26 connected to 52,54). Blasius et al teach the register maintains the indications of each switch's configuration when the four switches are programmed in a second configuration (col. 8:43-64).

6. Claims 18,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hella in view of Blasius et al (US 4573410) as applied to claim 17 above, and further in view of AAPA.

Claim18: Hella and Blasius et al teach the limitations of claim 17. Referring to claim 18, Hella teaches configuring an H-bridge circuit, in a first configuration of the configurable H-bridge circuit as the motor drive circuit (par. 20) and a second configuration of the configurable H-bridge circuit as the discrete switches to supply electricity to electrically powered components (configuration of 24, 26 coupled to 52, 54; par 21). Blasius et al teach maintaining an indicator of the implementation of the configurable H-bridge circuit, wherein the indicator indicates at least one of a first configuration of the configurable H-bridge circuit as the motor drive circuit and a second configuration of the configurable H-bridge circuit as the discrete switches (col. 8:17-25, 43-58; col. 9:7-15). It is unclear if they teach the H-bridge to supply electricity to independent electrically powered components. Applicant's prior art teaches that it is well known in the art that an H-bridge is configured to independently drive a motor (pg 1:0003). It would have been obvious to one having ordinary skill in the art at the time the invention was made use the H-bridge of Hella and Blasius et al independently, as admitted by applicant in order to drive plural motors.

Claim 22: Hella and Blasius et al teach the limitations of claim 17. Referring to claim 22, Hella teaches configuring an H-bridge circuit control according to a register (46) to couple a switch of the configurable H-bridge circuit to a switched component in an event that the H-bridge circuit is implemented as the discrete switches (configuration of 24,26 coupled to 52,54). Blasius et al teach configuring an H-bridge circuit control according to the indicator in the configuration register (col. 8:43-58). IT is unclear if they teach the H-bridge to supply electricity to independent electrically powered components. Applicant's prior art teaches that it is well known in the art that an H-bridge is configured to independently drive a motor (pg 1:0003). It would have been obvious to one having ordinary skill in the art at the time the invention was made use the H-bridge of Hella and Blasius et al independently, as admitted by applicant in order to drive plural motors.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (571) 272-2069. The examiner can normally be reached on Mon.- Fri. from 5:30 am - 2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Renata McCloud
Examiner
Art Unit 2837

rdm